

# Design and Installation Manual for the Infiltrator ATL System in Maine



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The purpose of this manual is to provide the minimum specifications for design and installation of the Infiltrator ATL (Advanced Treatment Leachfield) System in Maine. All local ordinances, requirements, and procedures must be followed. Each revised version of this manual supersedes the previous version.

The configurations presented in this document are common designs and are provided for illustrative purposes. They are not intended to restrict the use of other configurations, which may be utilized provided the design conforms to 10-144 CMR 241, the State of Maine Subsurface Wastewater Disposal Rules as applicable.

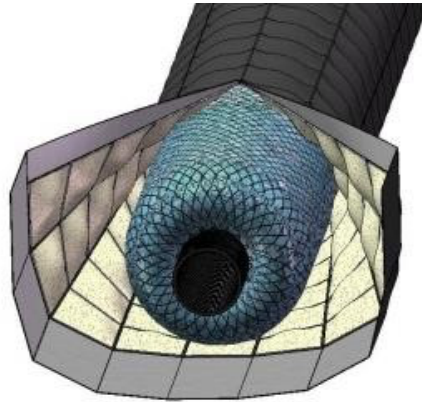
**For more detailed design and installation information, please contact Infiltrator Water Technologies at 1-800-221-4436.**

# Maine

### The Infiltrator ATL System

The Infiltrator ATL is a patent-pending, proprietary system consisting of six components. Upon entering the Infiltrator ATL, septic tank effluent progresses through each component as follows:

- nominally 12-inch-diameter conduit
  - 4-inch-diameter pipe
  - Large-diameter synthetic aggregate – Coarse geotextile
  - Small-diameter synthetic aggregate
  - Fine geotextile
- specified system sand



**Infiltrator ATL Conduit**

“System sand” is the term used to describe the coarse sand material that surrounds the Infiltrator ATL System (ATL System) conduits. Acceptable material for use as system sand includes:

- material which meets ASTM C33 specifications; or
- material which meets the requirements of Section 11(E)(2) of the State of Maine Subsurface Wastewater Disposal Rules (Rules).

### Information Specific to Use of the ATL System in Maine

The ATL System is approved for use in the State of Maine as a dispersal technology by the Maine Department of Health and Human Services (DHHS) in accordance with the State of Maine Subsurface Wastewater Disposal Rules (Rules). Testing in accordance with NSF/ANSI Standard 40 has determined that the Infiltrator ATL System treats domestic strength wastewater to Class I levels, which allows for design and installation of the ATL System in the State of Maine in accordance with the instructions in this manual.

If design, installation, operation, or maintenance specifications are not specifically addressed in this manual, relevant requirements in the Rules shall be applicable.

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## Dispersal Technology Approval

The ATL System is approved for use in Maine by DHHS as a dispersal technology. Under this approval, the ATL System may be designed and installed as a replacement for conventional pipe and aggregate with a rating of 5.0 square feet of absorption area per linear foot of ATL conduit.

## INTRODUCTION

### Treatment System Approval

The ATL System is approved for use in Maine by DHHS as a dispersal technology for use in bed applications. Under this approval, the ATL System may be designed and installed in accordance with the specifications in this manual. Critical information specific to the use of the ATL System as a bed system in Maine include:

- Elevated Systems

When any portion of the ATL System is above original grade, the ATL System is considered to be an elevated system. ATL Systems designed and installed as elevated systems shall include fill extensions which reach a minimum of 3 feet beyond the ATL conduit rows before tapering begins. Tapering shall be a maximum of 4/1.

- Sloping Sites

Sites shall be considered to be “sloping sites” when there is more than 10% slope at existing grade. Maximum site slope is 33%.

The ATL System may be installed at a maximum of 20% slope. ATL Systems designed to be installed at greater than 20% slope require a variance from DHHS. System sand or fill may be utilized to keep the installed ATL System slope within the 20% limitation.

In all sloped system applications, a 3-foot system sand extension must be added on the downslope side of the ATL System. This extension is 6 inches deep, with system sand filling the area between the edge of the ATL System and the bottom edge of the system sand extension.

- Cover

The ATL System shall be covered with a minimum of 8 inches of material, in accordance with Section 11(E)(2)(c) and (d) of the Rules. These 8 inches shall include both fill material and at least 4 inches of soil suitable for establishment of a good vegetative cover.

- Minimum Center-to-Center Spacing

Minimum center-to-center spacing of ATL conduit rows is 1.5 feet. Conduit row spacing larger than 1.5 feet is allowed at the discretion of the system designer.

## SYSTEM CONFIGURATIONS

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- Separation Distances

Vertical separation distances are measured from the bottom of the ATL conduit. Horizontal separation distances are measured from the edge of the ATL conduit.

The Infiltrator ATL System can be designed for use on level and sloped, subsurface and above-ground sites. Examples are shown in the following pages.

The following minimum system sand dimensions are required for all Infiltrator ATL System configurations:

- 6 inches below the Infiltrator ATL conduit rows;
- 6 inches between adjacent Infiltrator ATL conduit rows;
- 6 inches beside (outside) any Infiltrator ATL conduit row with no adjacent conduit row; •  
6 inches extending beyond both ends of the Infiltrator ATL conduit row; and
- no system sand on top of the ATL conduit rows.

There is no minimum requirement for system sand on top of the ATL conduit rows. Minimum cover requirements as established in Section 11(E) of the Rules are applicable.

### **Bed Configurations**

The ATL System may be designed and installed in a bed configuration. Refer to the detailed design and installation instructions in this manual.

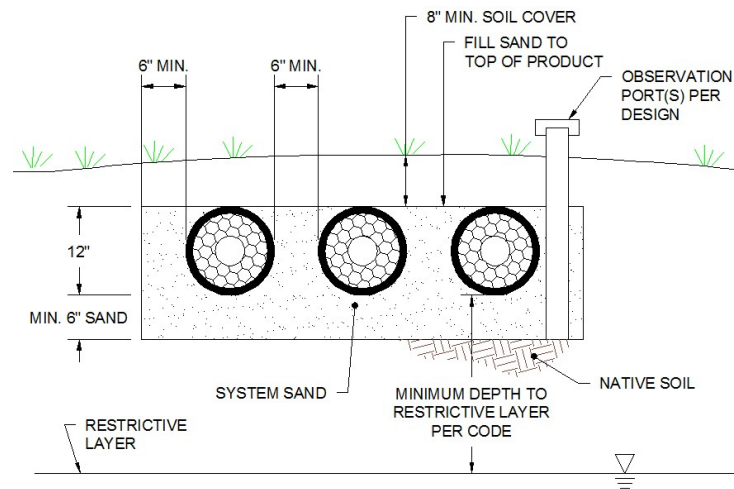
### **Trench Configurations**

The ATL System is approved for use as a disposal technology and may be installed as such in trench configurations. The ATL is approved at a sizing of 5.0 square feet of disposal area per linear foot of ATL conduit.

### Subsurface Systems

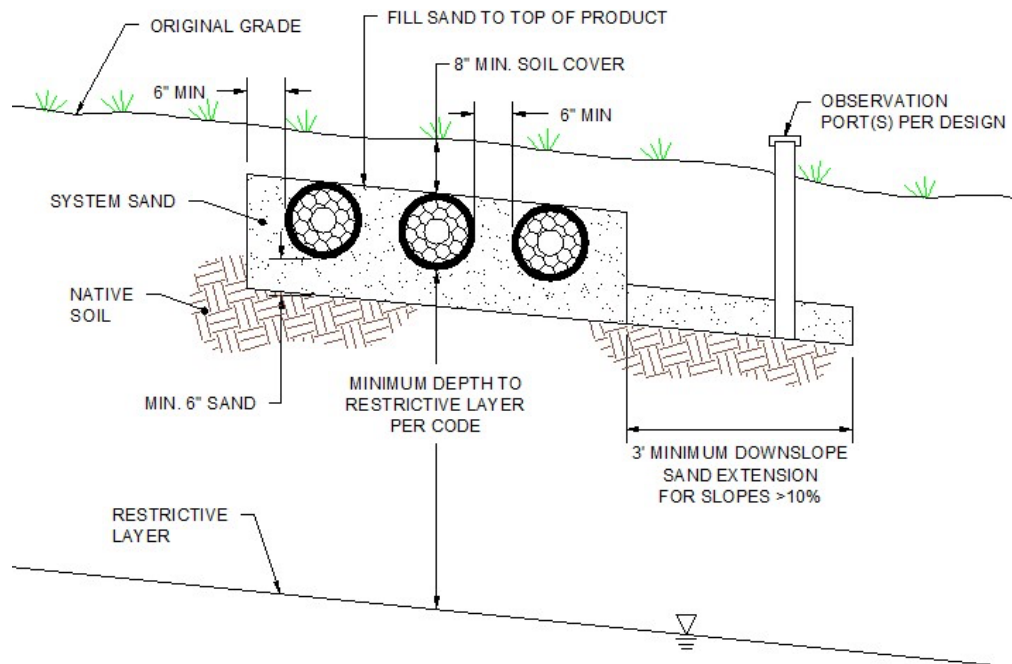
#### Level Cross-Section View

(not to scale)



#### Sloped Cross-Section View

(not to scale)



#### NOTES:

1. Number and length of conduits per design.
2. Serial distribution shown, but system may be served by distribution box or manifold, per state and local regulations.
3. Venting is not required but is optional at the discretion of the designer.

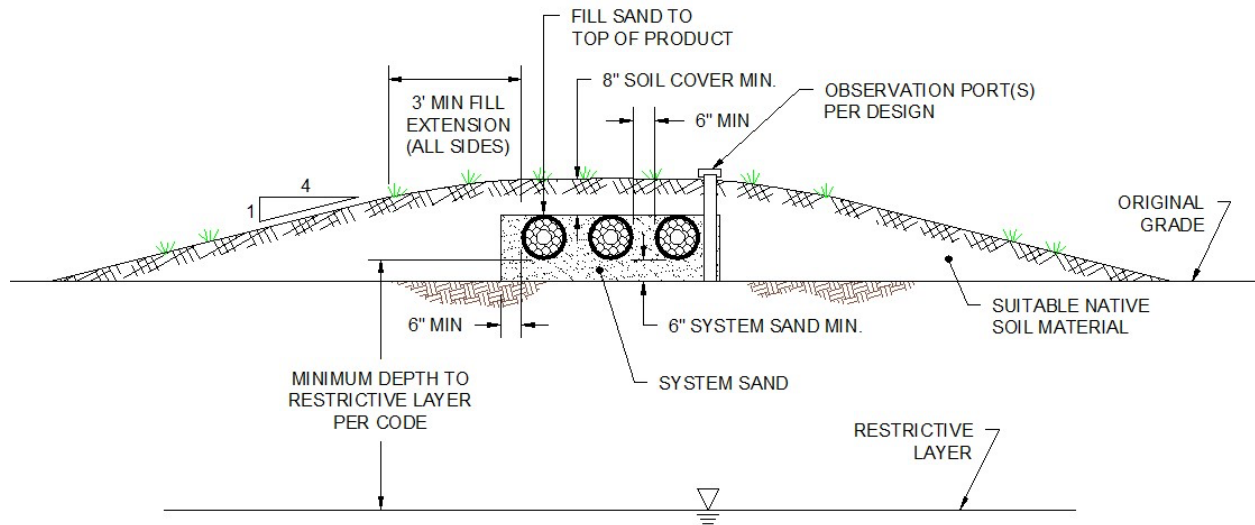
## SYSTEM CONFIGURATIONS

4. Pumping is not required unless gravity flow cannot be achieved.
5. Observation ports are optional, per engineer design.

### Above-Grade Systems

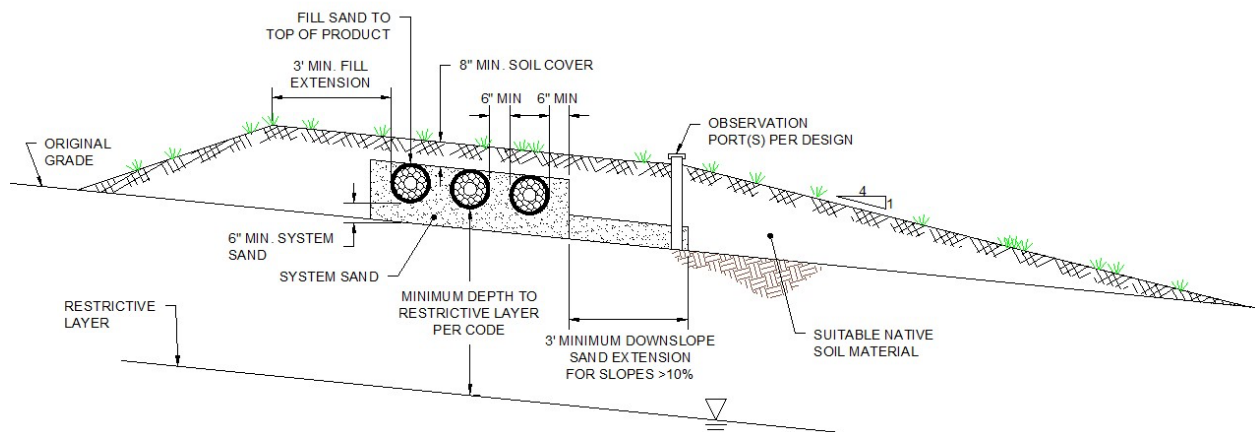
#### Level Cross-Section View

(not to scale)



#### Sloped Cross-Section View

(not to scale)



#### NOTES:

1. Number and length of conduits per design.
2. Serial distribution shown, but system may be served by distribution box or manifold, per state and local regulations.
3. Venting is not required but is optional at the discretion of the designer.

4. Pumping is not required unless gravity flow cannot be achieved.
5. If the infiltrative surface of the Infiltrator ATL System bed must be elevated to achieve minimum vertical separation requirements, the area between the original grade and the Infiltrator ATL system sand shall be comprised of additional system sand.
6. Observation ports are optional, per engineer design.

## SYSTEM DESIGN

Designing the Infiltrator ATL System in Maine is a five-step process.

1. *Determine the minimum total length of Infiltrator ATL conduit required*
2. *Select the slope at which the ATL System will be installed*
3. *Determine the center-to-center spacing of the ATL conduit rows*
4. *Select the number of rows and length of ATL conduit to be installed*
5. *Calculate the overall system footprint*

### Step 1: Determine the minimum total length of Infiltrator ATL conduit required

Determine the minimum length of Infiltrator ATL conduit from Table 1, based on the soil profile from the site evaluation and the number of bedrooms.

Soil Profile	Length of ATL Conduit Required (ft)						Commercial per 100 gpd
	Bedrooms						
	2	3	4	5	6	Add'l	
1	148	221	295	369	443	74	82
2	140	210	280	350	420	59	66
3	140	210	280	350	420	70	66
4,5, & 6	140	210	280	350	420	70	52
7	140	210	280	350	420	70	66
8	148	221	295	369	443	74	82
9	180	270	360	450	540	90	100

**Table 1:** Minimum required ATL conduit length

### Step 2: Select the slope at which the ATL System will be installed

Using the site evaluation as a guide, select the slope at which the ATL System will be installed.

#### NOTE:

1. *The ATL System may be installed at a maximum of 20% slope. ATL Systems designed to be installed at greater than 20% slope require a variance from DHHS.*
2. *System sand or fill may be utilized to keep the installed ATL System slope within the 25% limitation.*

3. *A 3-foot-minimum downslope sand extension is required for slopes greater than 10%.*

### **Step 3: Determine the center-to-center spacing of the ATL conduit rows**

Determine the center-to-center spacing of the ATL conduit rows. Minimum center-to-center spacing is 1.5 feet. At the discretion of the system designer, wider center-to-center spacing as detailed in Table 2, referencing the soil profile from the site evaluation and the selected installed ATL System slope.



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## SYSTEM DESIGN

Slope (%)	Center-to-Center ATL Conduit Spacing (ft)					
	Soil Profile					
	5 & 6	4	2	3 & 7	1 & 8	9
0 – 10	1.50	1.50	1.75	2.00	2.50	3.00
11 – 15	1.50	1.75	2.00	2.25	2.75	3.25
16 – 20	1.75	2.00	2.25	2.50	3.00	3.50
21 – 25	2.00	2.25	2.50	2.75	3.25	3.75

**Table 2:** Center-to-center spacing of the ATL conduit rows

### Step 4: Select the number of rows and length of ATL conduit to be installed

Considering the total length of ATL conduit required, the slope at which the ATL System will be installed, and the design center-to-center ATL conduit row spacing, select the number of ATL System conduit rows that will best fit the site.

Calculate the length of ATL Conduit per row using the following equation:

$$\text{ATL Conduit Length per Row} = \frac{\text{Length of ATL Conduit Required}}{\text{Number of ATL Conduit Rows}}$$

#### NOTE:

1. Infiltrator ATL conduits comes in 5- and 10-foot lengths; ATL conduits can either be cut to meet the minimum conduit length per row or the calculations can be rounded up to the nearest 5 feet.

### Step 5: Calculate the overall system footprint

Calculate the total width of the Infiltrator ATL System using Table 3 and the center-to-center spacing and number of conduit rows that were determined in Steps 3 and 4. The total length of the system is determined by adding 1 foot to the ATL Conduit Length per row, determined in Step 4.

Center-to-Center Spacing (ft)	Width of ATL System (ft)					
	Number of ATL Conduit Rows					
	2	3	4	5	6	7
1.50	3.50	5.00	6.50	8.00	9.50	11.00

<b>1.75</b>	3.75	5.50	7.25	9.00	10.75	12.50
<b>2.00</b>	4.00	6.00	8.00	10.00	12.00	14.00
<b>2.25</b>	4.25	6.50	8.75	11.00	13.25	15.50
<b>2.50</b>	4.50	7.00	9.50	12.00	14.50	17.00
<b>2.75</b>	4.75	7.50	10.25	13.00	15.75	18.50
<b>3.00</b>	5.00	8.00	11.00	14.00	17.00	20.00
<b>3.25</b>	5.25	8.50	11.75	15.00	18.25	21.50
<b>3.50</b>	5.50	9.00	12.50	16.00	19.50	23.00
<b>3.75</b>	5.75	9.50	13.25	17.00	20.75	24.50

**Table 3:** Total ATL System Width (ft)

## SYSTEM DESIGN EXAMPLE

The following sample system design calculations are intended to illustrate the methodology for designing an ATL System in Maine. The sample system design calculations are provided in the step-bystep format described above.

Sample system specifications:

- New construction, 4-bedroom home
- 6% slope on site
- Soil profile = 7

### Step 1: Determine total Infiltrator ATL conduit length

With a soil profile of 7 from the site evaluation, and a 4-bedroom home, Table 1 dictates that the ATL System include a minimum of 238 linear feet of ATL conduit.

Soil Profile	Length of ATL Conduit Required (ft)						Commercial per 100 gpd
	Bedrooms						
	2	3	4	5	6	Add'l	
1	148	221	295	369	443	74	82
2	140	210	280	350	420	59	66
3	140	210	280	350	420	70	66
4,5, & 6	140	210	280	350	420	70	52
7	140	210	280	350	420	70	66
8	148	221	295	369	443	74	82
9	180	270	360	450	540	90	100

**Table 1:** Minimum required ATL conduit length

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**Step 2: Select the slope at which the ATL System will be installed**

The site evaluation indicates that the slope at the site is 6%. To keep costs at a minimum (e.g. install the ATL System at the same slope as that of the site), the ATL System will be installed at a 6% slope.

**Step 3: Determine the center-to-center spacing of the ATL conduit rows**

The designer is choosing to utilize the minimum 1.5-foot center-to-center spacing specification.

Slope (%)	Center-to-Center ATL Conduit Spacing (ft)					
	Soil Profile					
	5 & 6	4	2	3 & 7	1 & 8	9
0 – 10	1.50	1.50	1.75	2.00	2.50	3.00
11 – 15	1.50	1.75	2.00	2.25	2.75	3.25
16 – 20	1.75	2.00	2.25	2.50	3.00	3.50
21 – 25	2.00	2.25	2.50	2.75	3.25	3.75

**Table 2:** Minimum center-to-center spacing of the ATL conduit rows

**SYSTEM DESIGN EXAMPLE****Step 4: Select the number of rows and length of ATL conduit to be installed**

Considering that 280 linear feet of ATL conduit is required as well as the conditions on the site, the designer may select four rows of ATL conduit.

The length of ATL Conduit per row is then calculated as:

$$\begin{aligned} \text{ATL Conduit Length per Row} &= \frac{\text{Length of ATL Conduit Required}}{\text{Number of ATL Conduit Rows}} \\ \text{ATL Conduit Length per Row} &= \frac{280 \text{ total ft of ATL conduit}}{4 \text{ rows}} = 70 \text{ ft/row} \end{aligned}$$

**Step 5: Calculate the overall system footprint**

Since the slope is less than 10%, there is no system sand extension required. Using Table 3 with a center-to-center spacing of 1.5 feet and 4 conduit rows (determined in Steps 3 and 4), the total system width is 6.5 feet.

Center-to- (ft)	Width of ATL System (ft) Center										Number of ATL Conduit Rows Spacing		
	2	3	4	5	6	7							
1.50		3.50		5.00		6.50		8.00		9.50		11.00	
1.75		3.75		5.50		7.25		9.00		10.75		12.50	
2.00	4.00	6.00		8.00	10.00	12.00	14.00	2.25	4.25	6.50		8.75	
	11.00	13.25		15.50	2.50	4.50	7.00	9.50	12.00	14.50		17.00	
2.75	4.75	7.50		10.25	13.00	15.75	18.50	3.00	5.00	8.00		11.00	
	14.00	17.00		20.00	3.25	5.25	8.50	11.75	15.00	18.25		21.50	
3.50	5.50	9.00		12.50	16.00	19.50	23.00	3.75	5.75	9.50		13.25	
					17.00	20.75	24.50						
Table 3: Total ATL System Width (ft)													

The total system length of the Infiltrator ATL system is calculated as 81 feet (80 feet/row + 6 inches of system sand on each end).

**The overall system footprint is 6.5 ft W x 71 ft L.**

#### INFORMATION FOR SYSTEM OWNERS

Basic rules of onsite sewage treatment system use and care apply to the ATL System. System owners shall operate the system in accordance with the Maine Subsurface Wastewater Disposal Rules and the following:

#### System Use and Abuse

Your ATL System is intended for use with residential-strength wastewater within the design daily flow volume. To ensure long-term function of your system:

- Keep daily wastewater flow within design parameters ○ Do not connect the rainwater management system to, and direct water from the rainwater management system away from, the ATL System.
- Introduce only normal residential wastewater into the system ○ Solvents, paint, pharmaceuticals, aggressive cleaning products, and non-biodegradable items should not enter the ATL system.
  - Solids, such as but not limited to, cigarette butts, diapers, feminine hygiene products, cat litter, and paper towels should not be introduced into the ATL system.
- Maintain leak-free household plumbing fixtures, such as faucets and toilets.
- Do not utilize a garbage grinder.

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## **Operation and Maintenance**

Your ATL System has no specific operating instructions. Proper use of the system as noted above is the primary operating concern.

Maintenance of the ATL System includes the following:

- If the septic tank has an effluent filter, it should be cleaned by a qualified system service provider on an annual basis.
- The septic tank should be pumped on a regular basis and, if concrete, checked for leaks and cracks. The interval for septic tank pumping varies depending upon use. Check with a qualified system service provider or your local health department for the appropriate pumping interval.
- If present, the alarm system should be tested annually by the homeowner to ensure that it is functional if one is included in the system.

If at any time you have concerns about the use, operation, or maintenance of your ATL System, contact the Infiltrator Water Technologies, LLC Technical Department.

## **System Start-up**

There are no specific requirements for placing the ATL System into service. If the system has an alarm, the property owner should, after system use has been initiated, test the alarm to ensure it is functional if one is included in the system.

## **INFORMATION FOR SYSTEM OWNERS**

### **Intermittent Use**

The ATL System is designed for intermittent use, and requires no special attention if it is to be placed out of use for extended periods of time.

### **Trouble Shooting**

In the event that any of the following indicators arise, contact a qualified system service provider.

- Wastewater back-up into the dwelling
- Persistent septic odor
- Unusually wet area atop and/or around the system
- “Ponding” of effluent on the lawn
- “Breakout” of effluent along the side of a slope

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## Repair

A qualified system service provider shall be contacted when there are indications of malfunction with the ATL System. When visiting the site, the qualified system service provider shall, at a minimum, do the following:

- Assess the present condition of the ATL System, and the surrounding area
- Research the history of use, including:
  - water volume use
  - contaminants
- Evaluate site for groundwater intrusion
- Inspect septic tank
- Inspect the ATL System conduit lines
- Check faucet and toilet function

Upon completion of the site visit, the qualified system service provider should contact the Infiltrator Water Technologies, LLC Technical Department with his or her report.



### Before You Begin

These installation instructions are for the ATL System in Maine. ATL Systems may only be installed according to this manual, the latest versions of the Maine Subsurface Wastewater Disposal Rules, and local health department requirements.

If unsure of the installation requirements for a site, contact your local health department. If unsure of the use of the ATL System, contact Infiltrator Water Technologies, LLC. The soil and site evaluation and the design of the onsite system must be reviewed, and a construction permit obtained from the local health department before installation.

#### Materials and Equipment Needed

- |   |   |
|---|---|
| <input type="checkbox"/> Infiltrator ATL System conduits  | <input type="checkbox"/> Shovel and rake  |
| <input type="checkbox"/> ASTM C33 system sand, or material that meets the requirements of Section 11 (E) of the Rules | <input type="checkbox"/> 4-inch inspection port and cap meets the requirements of Section 11 (E) of the Rules |
| <input type="checkbox"/> PVC pipe and couplings   | <input type="checkbox"/> Endcaps  |
| <input type="checkbox"/> Backhoe  | <input type="checkbox"/> Infiltrator ATL System conduit internal pipe couplers                                |
| <input type="checkbox"/> Laser, transit or level  | <input type="checkbox"/> Tape measure   |

**Common practices shall apply to the installation of the Infiltrator ATL System. These include, but are not limited to:**

- ☐ avoid soil compaction on the infiltrative surface area, including all areas downslope of a sloped system;
- ☐ use a tracked vehicle for material installation;
- ☐ avoid installation during wet periods; and
- ☐ install the Infiltrator ATL System conduit and system sand on the same day that the system footprint is excavated/exposed.

### Excavating and Preparing the Site

**NOTE:** *The Infiltrator ATL System may not be installed during periods when the soil is sufficiently wet to exceed its plastic limit, as this causes machinery to smear the soil.*

1. Stake out the locations of tank(s), pipes, conduit rows, and corners of the system to be tilled/excavated, per engineer design. Set the elevations as shown on the approved plan. [Note: The proper elevation of solid PVC header line going to each Infiltrator ATL conduit row should be determined to ensure compliance with the required system bottom depth as shown on the approved permit. This height may vary dependent on system height and configuration used.]
2. Install sedimentation and erosion control measures.

**NOTE:** The installation of temporary drainage swales/berms (surface diversions) may be necessary to protect the site during rainfall events.

3. Excavate the bed area or till the ground as per the design.
4. Rake the bed bottom and sides (when applicable) if smearing has occurred during excavation. Remove large stones and protruding roots.

**NOTE:** Smearing does not occur in sandy soils, so raking is not necessary. In fine textured soils (silts and clays), avoid walking on the excavation bottom to prevent compaction and loss of soil structure.

5. Verify that the bed area is at the proper slope from side-to-side and from end-to-end using a level, transit, or laser.

### Installing the System

1. Install the system sand basal layer over the entire Infiltrator ATL System area as per design. System sand should be leveled and stabilized prior to introduction of the Infiltrator ATL conduit. Installer should retain records certifying that system sand meets ASTM C 33 or Section 11(E) of the Rules ) requirements.
2. Remove plastic stretch wrap from Infiltrator ATL conduits.
3. Place Infiltrator ATL conduits on the surface of the system sand in the configuration shown on the system design. Using the provided 4-inch-diameter internal pipe couplings, connect the Infiltrator ATL conduits end-to-end to create rows of the required length.
4. Infiltrator ATL conduit shall be installed level. A laser level or transit is recommended to ensure proper alignment.
5. Infiltrator ATL conduit rows shall be:
  - installed on a level plane with one another;
  - be installed parallel to any contours; and
  - be separated by a minimum of 6 inches of system sand.
6. In serial distribution applications, use of an offset adapter is recommended.
7. Install a cap on the end of each Infiltrator ATL conduit row that is not connected with piping.
6. Once the Infiltrator ATL conduit is placed on the surface of the system sand and distribution piping is connected to the conduits per design, additional system sand shall be ladled between and to the top of each of the Infiltrator ATL conduit rows. System sand shall also be installed on each side and at each end of the backfilled Infiltrator ATL conduit rows, per the design. This additional system sand shall be stabilized.

### Installing Observation/Monitoring Ports



## INSTALLATION INSTRUCTIONS

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If observation or monitoring ports are specified in the system design:

1. Cut a 6-inch PVC pipe to the desired length, ensuring the pipe will extend a minimum of 6 inches above final grade.
2. Drill a minimum of ten ¼" to ½" holes within ½ to 6 inches of the bottom of the pipe, and wrap the bottom end of the pipe in filter fabric..
3. Install the monitoring pipe at the appropriate location, based on site conditions, and ensure the bottom of the pipe is at the bottom of the system sand footprint (at the system sand/native soil interface).
4. Install a removable, water-tight, secure cover cap.

### Covering the System

**NOTE:** Before backfilling, the system shall be inspected and approved by a representative of the local health department, as required by the Maine Subsurface Wastewater Disposal Rules and in compliance with local ordinances and procedures.

1. Material placed around the system sand and atop the Infiltrator ATL conduit may be additional system sand or material that meets the requirements of the Maine Subsurface Wastewater Disposal Rules. However, the final 4 inches placed atop or adjacent to the Infiltrator ATL System shall be comprised of material that will sustain plant growth.
2. Backfill the bed by pushing material over the Infiltrator ATL System. It is best to mound several extra inches of soil over the finish grade to allow for settling. This also ensures that runoff is diverted away from the system. Keep a minimum of 12 inches of consolidated cover over the Infiltrator ATL conduits before driving over the system.

*Note: Do not drive over the system while backfilling in sand.*

3. After the system is covered, the site should be seeded or sodded to prevent erosion.

**NOTE:** If the system is for new home construction, it is important to leave marking stakes along the boundary of the system. This will notify contractors of the system location so they will not cross it with equipment or vehicles.

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## WARRANTY

### **INFILTRATOR WATER TECHNOLOGIES, LLC ("Infiltrator") ATL** **SYSTEM STANDARD LIMITED WARRANTY**

- (a) The structural integrity of the Infiltrator ATL System conduits manufactured by Infiltrator (collectively referred to as "Units"), when installed and operated in a leachfield of an onsite septic system in accordance with Infiltrator's installation instructions, is warranted to the original purchaser ("Holder") against defective materials and workmanship for one year from the date upon which a septic permit is issued for the septic system containing the Units; provided, however, that if a septic permit is not required for the septic system by applicable law, the one (1) year warranty period will begin upon the date that installation of the septic system commences. In order to exercise its warranty rights, Holder must notify Infiltrator in writing at its corporate headquarters in Old Saybrook, Connecticut within fifteen (15) days of the alleged defect. Infiltrator will supply replacement Units for those Units determined by Infiltrator to be defective and covered by this Limited Warranty. Infiltrator's liability specifically excludes the cost of removal and/or installation of the Units.
- (b) THE LIMITED WARRANTY AND REMEDIES IN SUBPARAGRAPH (a) ARE EXCLUSIVE. THERE ARE NO OTHER WARRANTIES WITH RESPECT TO THE UNITS, INCLUDING NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
- (c) This Limited Warranty shall be void if any part of the ATL System components is manufactured by anyone other than Infiltrator. The Limited Warranty does not extend to incidental, consequential, special or indirect damages. Infiltrator shall not be liable for penalties or liquidated damages, including loss of production and profits, labor and materials, overhead costs, or other losses or expenses incurred by the Holder or any third party. Specifically excluded from Limited Warranty coverage are damage to the Units due to ordinary wear and tear, alteration, accident, misuse, abuse or neglect of the Units; the Units being subjected to vehicle traffic or other conditions which are not permitted by the installation instructions; failure to maintain the minimum ground covers set forth in the installation instructions; the placement of improper materials into the system containing the Units; failure of the Units or the septic system due to improper siting or improper sizing, excessive water usage, improper grease disposal, or improper operation; or any other event not caused by Infiltrator. This Limited Warranty shall be void if the Holder fails to comply with all of the terms set forth in this Limited Warranty.

Further, in no event shall Infiltrator be responsible for any loss or damage to the Holder, the Units, or any third party resulting from installation or shipment, or from any product liability claims of Holder or any third party. For this Limited Warranty to apply, the Units must be installed in accordance with all site conditions required by state and local codes; all other applicable laws; and Infiltrator's installation instructions.

- (d) No representative of Infiltrator has the authority to change this Limited Warranty in any manner whatsoever, or to extend this Limited Warranty. No warranty applies to any party other than the original Holder.

\* \* \* \* \*

The above represents the standard Limited Warranty offered by Infiltrator. A limited number of states and counties have different warranty requirements. Any purchaser of Units should contact Infiltrator's corporate headquarters in Old Saybrook, Connecticut, prior to such purchase, to obtain a copy of the applicable warranty, and should carefully read that warranty prior to the purchase of Units.

